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10/580,954

05/30/2006

Steffen Fries

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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

PAPER NUMBER

2437

MAIL DATE

DELIVERY MODE

11/25/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/580,954 | <b>Applicant(s)</b><br>FRIES, STEFFEN |  |
|                              | <b>Examiner</b><br>JEFFERY WILLIAMS  | <b>Art Unit</b><br>2437               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11, 14, 15, 17, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 14, 15, 17, 20, and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

This action is in response to the communication filed on 9/30/09.  
All objections and rejections not set forth below have been withdrawn.  
Claims 11, 14, 15, 17, 20, and 21 are pending.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/30/09 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1           **Claims 11, 14, 15, 17, 20 – 22 are rejected under 35 U.S.C. 103(a) as being**  
2           **unpatentable over DiSanto et al. (DiSanto), U.S. Patent Publication 2003/0009659**  
3           **in view of Blom et al. (Blom), “Conversational IP Multimedia Security”.**

4  
5  
6           Regarding claim 11, DiSanto discloses:

7           *a protocol processing unit processing messages of the key exchange protocol as*  
8           *well as data packets transported on the packet-oriented network using the encrypted*  
9           *transport protocol with keys for the encrypted transport protocol exchanged using a key*  
10           *exchange protocol,, converting voice signals, created by the one of the first and second*  
11           *telecommunication terminals at which said security module is connected, into data*  
12           *packets for transport via the encrypted transport protocol and converting data packets,*  
13           *arriving at said security module after transport via the encrypted transport protocol, into*  
14           *voice signals* (DiSanto, fig. 2b:210,220; par. 31, 42, 43 – Herein DiSanto discloses  
15           means for processing key exchange and encrypted data transport procedures [i.e.  
16           "protocols"] for the purpose of encrypting and decrypting voice and data  
17           communications between telecommunication terminals);

18           *a modem connection unit, used when said security module is connected in a*  
19           *connecting line at a second telecommunication terminal, setting up a modem*  
20           *connection between the second telecommunication terminal and at least one of the*  
21           *gateway and another second telecommunication terminal, with the data packets being*  
22           *transported using the encrypted transport protocol, along with messages of the key*  
23           *exchange protocol, via the modem connection* (DiSanto, fig. 2b:240; fig. 4; par. 33).

1        *wherein a point-to-point protocol connection is used over the modem connection*  
2        *in transporting the data packets using the encrypted transport protocol, as well as*  
3        *messages of the key exchange protocol* (DiSanto, par. 41, 42 – herein DiSanto  
4        discloses a procedure for establishing a direct connection between two nodes [i.e.  
5        “point-to-point protocol connection”].

6        DiSanto discloses a security module designed to provide encrypted transport to  
7        data between terminals within a network. DiSanto, however, does not appear to  
8        explicitly recite *wherein the encrypted transport protocol is Secure Real Time Transport*  
9        *Protocol*.

10       Blom discloses that applications for securely transmitting voice data through  
11       networks, such as disclosed by DiSanto, should employ SRTP (Blom, Abstract). It  
12       would have been obvious to one of ordinary skill in the art to employ the teachings of  
13       Blom within DiSanto. This would have been obvious because one of ordinary skill in the  
14       art would have been motivated by the teachings that such security protocols and  
15       methods were designed specifically so as to improve the secure transport of voice and  
16       data between communication terminals (Blom, Abstract; section 3).

17  
18       Regarding claim 14, the combination enables:

19       *wherein the key exchange protocol is multimedia Internet keying* (Blom,  
20       Abstract).

21  
22       Regarding claim 15, the combination enables:

1        *wherein for a telephone conversation, messages of the key exchange protocol*  
2        *are transported via a session initiation protocol, and wherein said protocol processing*  
3        *unit processes the session initiation protocol (Blom, section 2; section 5).*  
4

5        Regarding claim 17, the combination discloses that any conventional  
6        communications system may be employed (DiSanto, par. 19). While the combination  
7        does not appear to explicitly recite an ISDN communications system or the utilization of  
8        the B channel of the ISDN system, the examiner notes that the employment of ISDN  
9        and the B channel of ISDN were well known and implemented concepts to those of  
10       ordinary skill in the art. One of ordinary skill in the art would have been motivated to  
11       recognize ISDN and the utilization of communications over the B channel because such  
12       system was conventional and its benefits were well recognized.

13  
14       Regarding claim 20, the combination enables:  
15       *wherein the packet-oriented network is an Internet protocol-based data network,*  
16       *wherein the packet-oriented network is local area network (DiSanto, par. 19), and said*  
17       *modem connection unit sets up the modem connection in accordance with at least one*  
18       *of a V90 and a V92 standard (DiSanto, par. 33).*  
19

20       Regarding claim 21, the combination enables:

wherein said security module is connected into a connecting cable between a telephone handset and the one of the first and second telecommunication terminals (DiSanto, fig. 1).

Regarding claim 22, it comprises essentially similar recitations as claim 11, and it is rejected, at least, for the same reasons as claim 11. Furthermore, the combination enables:

*a modem connecting any telecommunication terminal of the telephone network with the protocol processing unit (Abstract; fig. 2b; fig. 4; par. 33), to ensure communication between the telecommunication terminal of the telephone network and any terminal of the IP-based Local Area Network using the encrypted transport protocol.*

## Response to Arguments

Applicant's arguments filed 9/30/09 have been fully considered but they are not persuasive.

*Applicant argues or asserts essentially that:*

As such, claim 11 provides a protocol processing unit that processes data packets transported on the packet-oriented network using the encrypted transport

1 protocol with keys for the encrypted transport protocol exchanged using a key exchange  
2 protocol. Furthermore, claim 11 includes a modem connection unit, used when the  
3 security module is connected in a connecting line at a second telecommunication  
4 terminal, that transports the data packets using the encrypted transport protocol, along  
5 with messages of the key exchange protocol, via the modem connection. As such, the  
6 security module of claim 11 provides for end-to-end encryption between a client in a  
7 packet-oriented network and a client in a TDM (analog or digital) using the key  
8 exchange protocol and the encrypted transport protocol (SRTP) because each of the  
9 two distinct networks individually use the key exchange protocol and the encrypted  
10 transport protocol via the claimed protocol processing unit and modem connection unit,  
11 respectively. These features are not taught by either DiSanto or Blom. (Remarks, pg. 5)

12  
13 *Examiner responds:*

14 The examiner notes that the applicant's arguments appear to equate to an  
15 assertion that the terms "packet-oriented network" and a "telecommunications network"  
16 (as found recited within the claims) denote separate and mutually distinct types of  
17 networks. However, it is respectfully noted that such an allegation is incorrect. Namely,  
18 'Telecommunications' is defined as the transmission of information over a distance.  
19 Therefore, a "telecommunications network" (as claimed) is a network for transmitting  
20 information over a distance. A "packet-oriented network" is clearly a  
21 "telecommunications network". Thus, it is respectfully noted that the premise of the



1 applicant's argument, essentially that the claims define "two distinct networks", is  
2 unfounded.

3       Additionally, as was previously noted to the applicant (e.g. see Final Action  
4 7/07/09), the applicant's arguments appear primarily directed to the claim recitations  
5 denoting the intended use of the claimed apparatus structures. As, such the examiner  
6 continues to remind the applicant that any supposed differences in the intended  
7 operation or usage of a claimed apparatus would not serve adequately distinguish a  
8 claimed apparatus over a prior art apparatus. Apparatus claims must result in a  
9 structural difference between the claimed invention and the prior art in order to  
10 patentably distinguish the claimed invention from the prior art. If the applicant feels that  
11 certain ways or methods of using recited structures (i.e. "a protocol processing unit", "a  
12 modem connection unit") is the basis for novelty, then the examiner respectfully  
13 suggests that the applicant may consider claiming a method as opposed to an  
14 apparatus.

15  
16 *Applicant argues or asserts essentially that:*

17       Furthermore, the modem of DiSanto does not correspond to the claimed modem  
18 connection unit, as indicated by the Examiner. As discussed above, the claimed modem  
19 connection unit when the security module is connected in a connecting line at a second  
20 (TDM) telecommunication terminal for transporting the data packets using the encrypted  
21 transport protocol, along with messages of the key exchange protocol, via the modem  
22 connection. As (Remarks, pg. 5)

1 *Examiner responds:*

2         In response, the examiner respectfully notes that the applicant's argument is  
3 unpersuasive, at least, for the reason that it fails to accurately reflect the claim  
4 language. In response to applicant's argument that the references fail to show certain  
5 features of applicant's invention, it is noted that the features upon which applicant relies  
6 (i.e., when the security module is connected in a connecting line at a second (TDM)  
7 telecommunication terminal) are not recited in the rejected claims.

8

9 *Examiner responds:*

10         Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount  
11 to a general allegation that the claims define a patentable invention without specifically  
12 pointing out how the language of the claims patentably distinguishes them from the  
13 references.

14         The examiner notes that the prior art clearly discloses "a modem connection unit,  
15 used when said security module is connected in a connecting line at a second  
16 telecommunication terminal, setting up a modem connection between the second  
17 telecommunication terminal and at least one of the gateway and another second  
18 telecommunication terminal" (DiSanto, fig. 2b:240; fig. 4; par. 33).

19         In response to applicant's argument that the references fail to show certain  
20 features of applicant's invention, it is noted that the features upon which applicant relies  
21 (i.e., "the fact that the claimed modem unit achieves a transfer of encryption  
22 technologies from the packet oriented network into public telephone network" and

1 “provide a technical solution enabling encryption of voice data in a heterogeneous  
2 network including a packet oriented network and a telephone network”) are not recited  
3 in the rejected claim(s). Although the claims are interpreted in light of the specification,  
4 limitations from the specification are not read into the claims. See *In re Van Geuns*, 988  
5 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6  
7 *Applicant argues or asserts essentially that:*

8 DiSanto. However, unlike in DiSanto, the modem of the claimed security module  
9 enables the data packets from the packet-oriented network to be transported using the  
10 encrypted transport protocol, along with messages of the key exchange protocol, via the  
11 modem connection. The procedure for establishing a direct connection between two  
12 nodes in DiSanto does not anticipate or render obvious this type of connection among  
13 terminals of different networks. (Remarks, pg. 6)

14  
15 *Examiner responds:*

16 First, the examiner notes that the applicant's assertion, “*The procedure for*  
17 *establishing a direct connection between two nodes in DiSanto does not anticipate or*  
18 *render obvious **this type of connection among terminals of different networks***”,  
19 does not serve to clearly point out how the recited claim language is distinguished from  
20 the prior art. The examiner presumes that the applicant's remarks (e.g. “this type of  
21 connection”) may be an assertion that the claim recitation of “point-to-point” is somehow  
22 different than the direct connection disclosed by DiSanto. However, the examiner

1 respectfully points out that this is merely an allegation by the applicant, the applicant  
2 does not support such an assertion by evidence or rationale, and there does not appear  
3 to be any reason to assume that a "point-to-point" connection is different than a "direct"  
4 connection. For this reason, at least, the examiner finds the applicant's remarks  
5 unpersuasive.

6 Second, the examiner reminds the applicant that the claim does not recite a  
7 procedure or method, but instead recites an "security module" apparatus comprising  
8 "protocol processing unit" and a "modem connection unit". Thus, the applicant's  
9 remarks (e.g. "***The procedure for establishing a direct connection between two nodes***  
10 *in DiSanto does not anticipate or render obvious this type of connection among*  
11 *terminals of different networks*"), do not appear to address the limiting features of the  
12 apparatus and appear to only pertain to features relative to the intended use of the  
13 apparatus. The examiner respectfully reminds the applicant that a claim containing a  
14 "recitation with respect to the manner in which a claimed apparatus is intended to be  
15 employed does not differentiate the claimed apparatus from a prior art apparatus" if the  
16 prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2  
17 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

18  
19 *Applicant argues or asserts essentially that:*

20 As is clear from MPEP §2173.05(g), there is nothing inherently wrong with  
21 defining some part of an invention in functional terms. Functional language does not, in  
22 and of itself, render a claim improper. In re Swinehart, 439 F.2d 210, 169 USPQ 226

(CCPA 1971). "A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used," e.g., a functional limitation may be used to functionally define a particular capability or purpose that is served by the recited element. (Remarks, pg. 6)

*Examiner responds:*

The examiner notes the applicant's remarks, however, the examiner respectfully points out that the issue at hand is not whether it is proper for an apparatus claim to comprise functional recitations. The examiner notes that the claims were not rejected or objected to for comprising functional recitations. The issue is whether such functional recitations distinguish an apparatus claim from the prior art apparatus. Accordingly, it is properly noted that "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)

*Applicant argues or asserts essentially that:*

In asserting an intended use argument, the prior art structure must be capable of performing the intended use. See, e.g., In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). Thus, the modem of DiSanto must be enabled to accomplish the claimed functional language of the present invention as set forth in claim

11, for example. Specifically, the modem of DiSanto must be enabled to include setting up a modem connection between the second telecommunication terminal and at least one of a gateway and another second telecommunication terminal, with the data packets being transported using the encrypted transport protocol, along with messages of the key exchange protocol, via the modem connection, wherein a point-to-point protocol connection is used over the modem connection in transporting the data packets using the encrypted transport protocol, as well as messages of the key exchange protocol. (Remarks, pg. 6, 7)

*Examiner responds:*

In response, the examiner respectfully notes that the applicant's remarks fail to provide any argument or clearly presented evidence showing how the prior art structure (i.e. 'modem connection unit' of DiSanto) is incapable of allowing the transmission of encrypted messages and key transport messages over its established connection with another telecommunications unit. For this reason, at least, the examiner notes that the applicant's argument (i.e. that the intended use of the recited "modem connection unit" somehow structurally distinguishes the claim over the prior art modem connection unit) is unpersuasive.

Nevertheless, the examiner continues to point out for the applicant's benefit, that the prior art enables the intended use of transmitting encrypted messages and key transport messages over a modem connection (see for example, DiSanto, par. 19, 41-43).

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

***See Notice of References Cited.***

A shortened statutory period for reply is set to expire **3** months (not less than 90 days) from the mailing date of this communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2437

1           Information regarding the status of an application may be obtained from the  
2   Patent Application Information Retrieval (PAIR) system. Status information for  
3   published applications may be obtained from either Private PAIR or Public PAIR.  
4   Status information for unpublished applications is available through Private PAIR only.  
5   For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
6   you have questions on access to the Private PAIR system, contact the Electronic  
7   Business Center (EBC) at 866-217-9197 (toll-free).

8  
9  
10   /Jeffery Williams/  
11   Examiner, Art Unit 2437  
12  
13   /Emmanuel L. Moise/  
14   Supervisory Patent Examiner, Art Unit 2437  
15